

4.2.B. 0801020902.

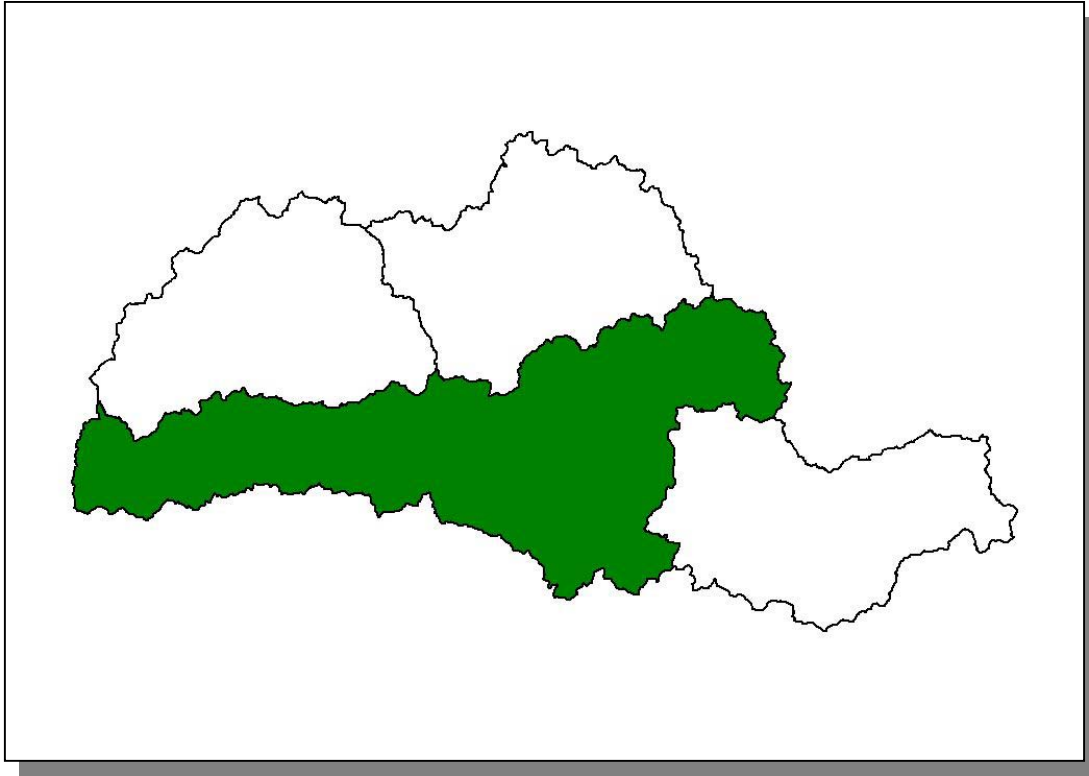


Figure 4-11. Location of Subwatershed 0801020902. All Loosahatchie HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

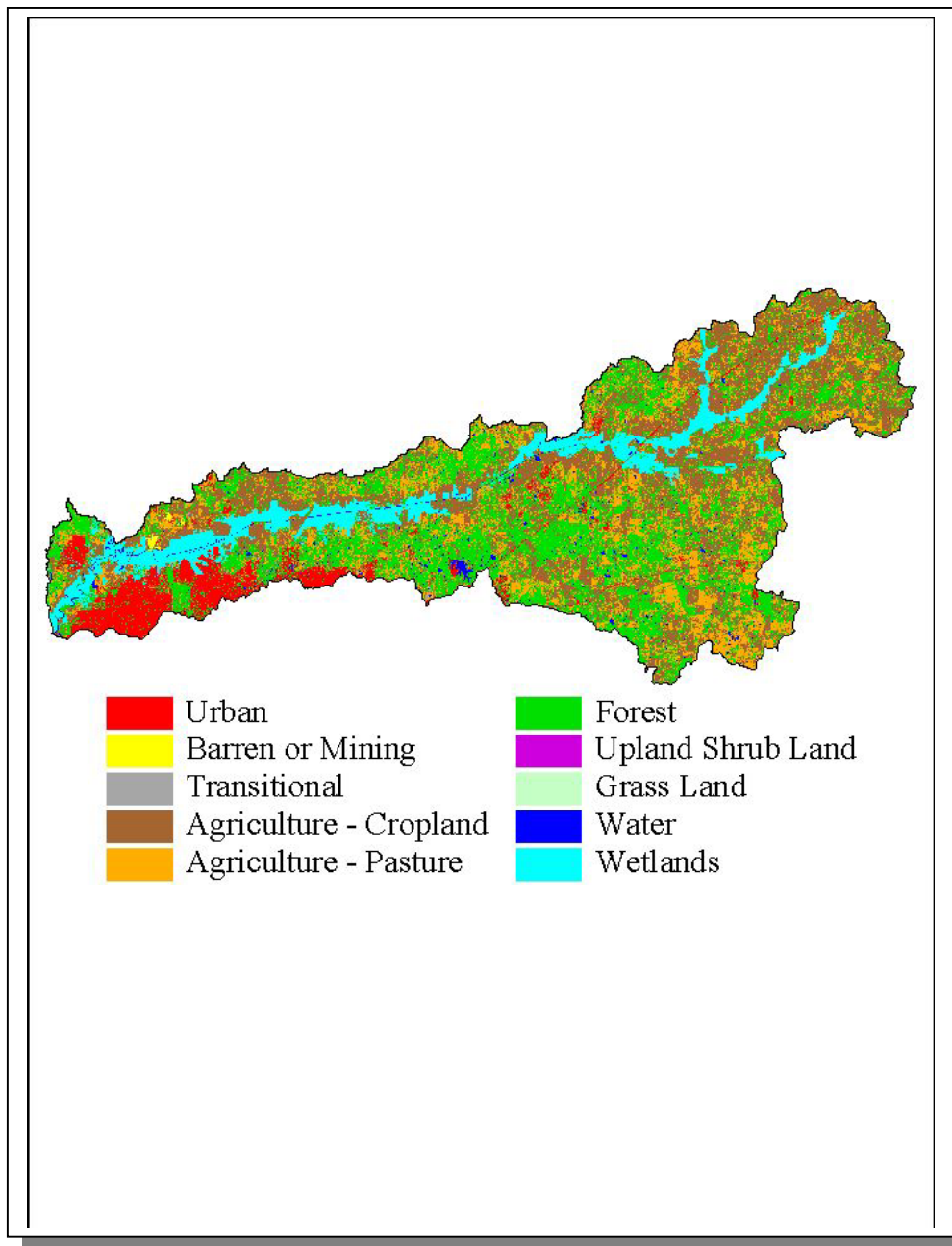


Figure 4-12. Illustration of Land Use Distribution in Subwatershed 0801020902.

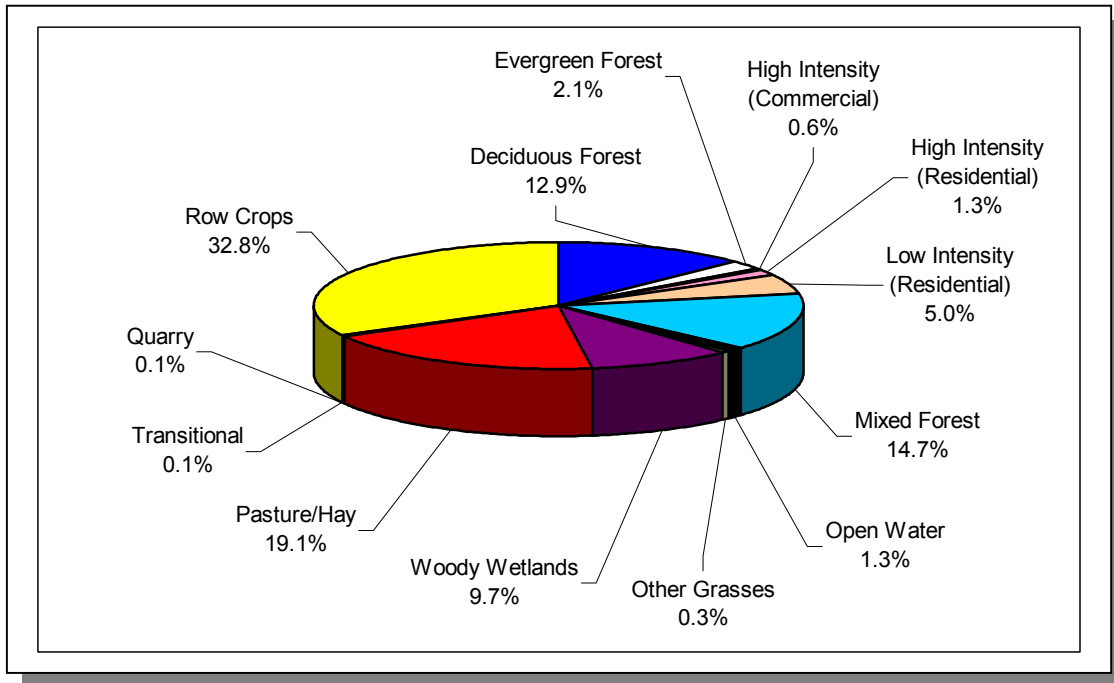


Figure 4-13. Land Use Distribution in Subwatershed 0801020902. More information is provided in Loosahatchie-Appendix IV.

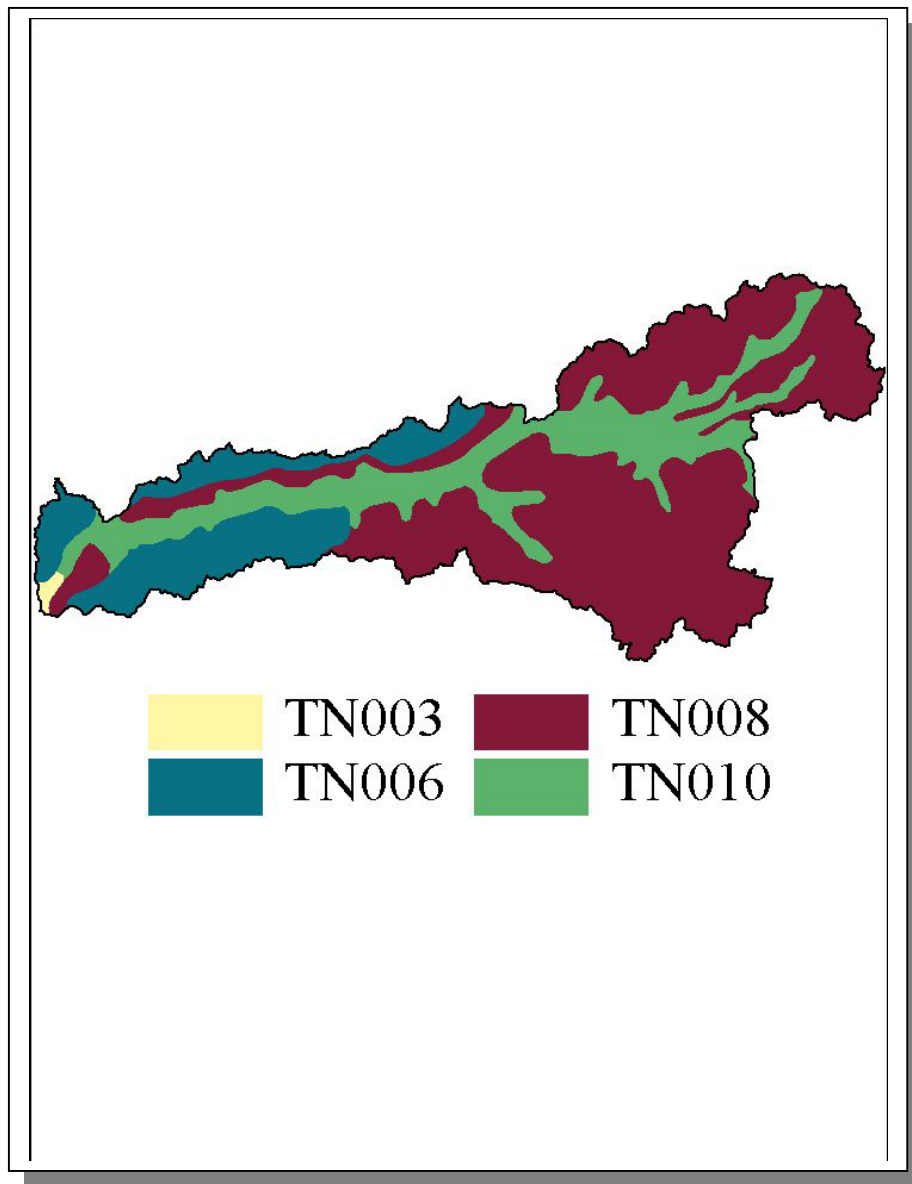


Figure 4-14. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0801020902.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN001	14.00	C	2.31	7.00	Silty Loam	0.33
TN003	62.00	C	0.50	6.65	Silty Clay	0.33
TN006	0.00	C	1.30	5.42	Silty Loam	0.48
TN008	2.00	C	1.38	5.20	Silty Loam	0.48
TN010	81.00	C	1.33	5.11	Silty Loam	0.44

Table 4-8. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0801020902. More information is provided in Loosahatchie-Appendix IV.

County	COUNTY POPULATION		Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED		PERCENT CHANGE
	1990	1997 Est.		1990	1997	
Fayette	25,559	29,412	21.63	5,528	6,321	15.1
Shelby	826,330	865,318	17.51	144,689	151,515	4.7
Total	851,889	894,730		150,217	157,876	5.1

Table 4-9. Population Estimates in Subwatershed 0801020902.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Arlington	Shelby	1,541	372	338	32	2
Bartlett	Shelby	26,989	8,807	8,545	217	45
Lakeland	Shelby	7,484	3,900	3,744	154	2
Memphis	Shelby	610,337	248,573	247,138	793	642
Millington	Shelby	17,866	4,440	4,269	37	134
Braden	Fayette	373	141	6	129	6
Gallaway	Fayette	743	220	165	47	8
Oakland	Fayette	430	145	126	18	1
Total		659,483	263,173	260,906	1,427	840

Table 4-10. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0801020902.

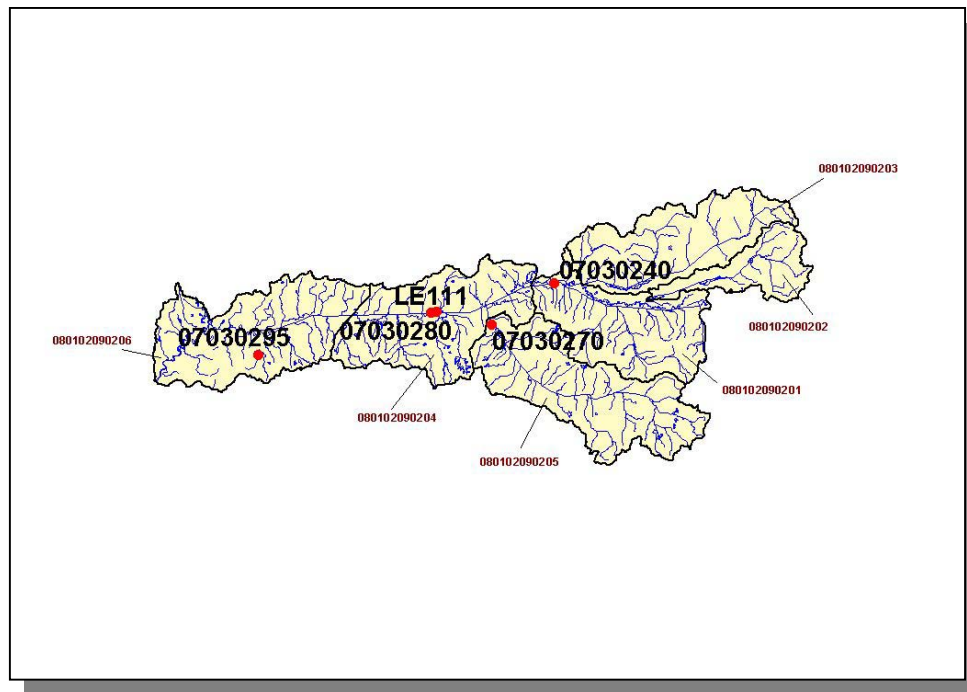


Figure 4-15. Location of Historical Streamflow Data Collection Sites in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information is provided in Loosahatchie-Appendix IV.

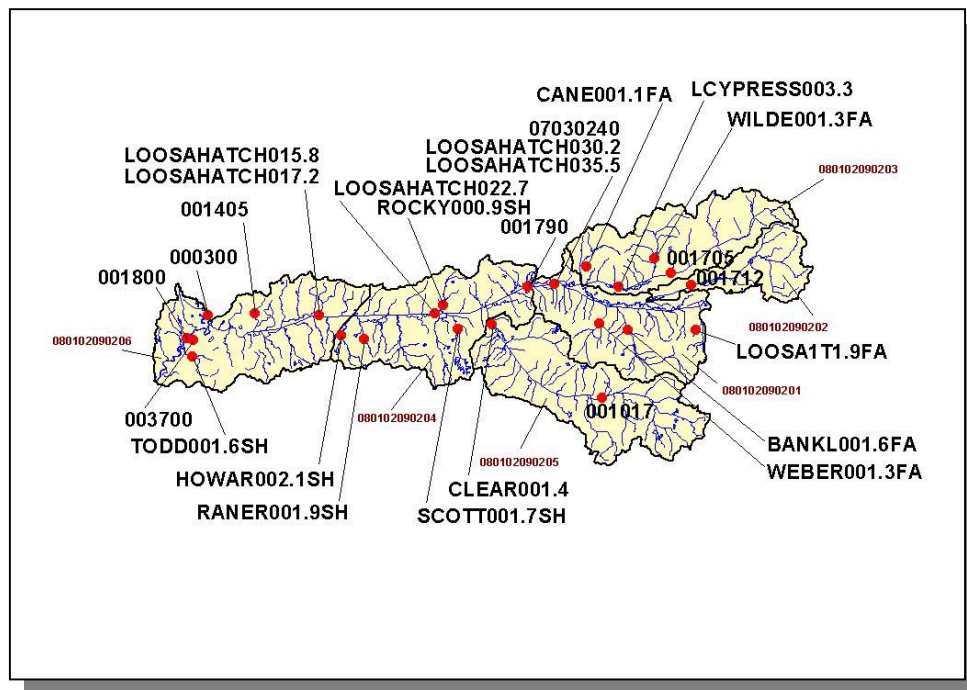


Figure 4-16. Location of STORET Monitoring Sites in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information is provided in Loosahatchie-Appendix IV.

4.2.B.ii. Point Source Contributions.

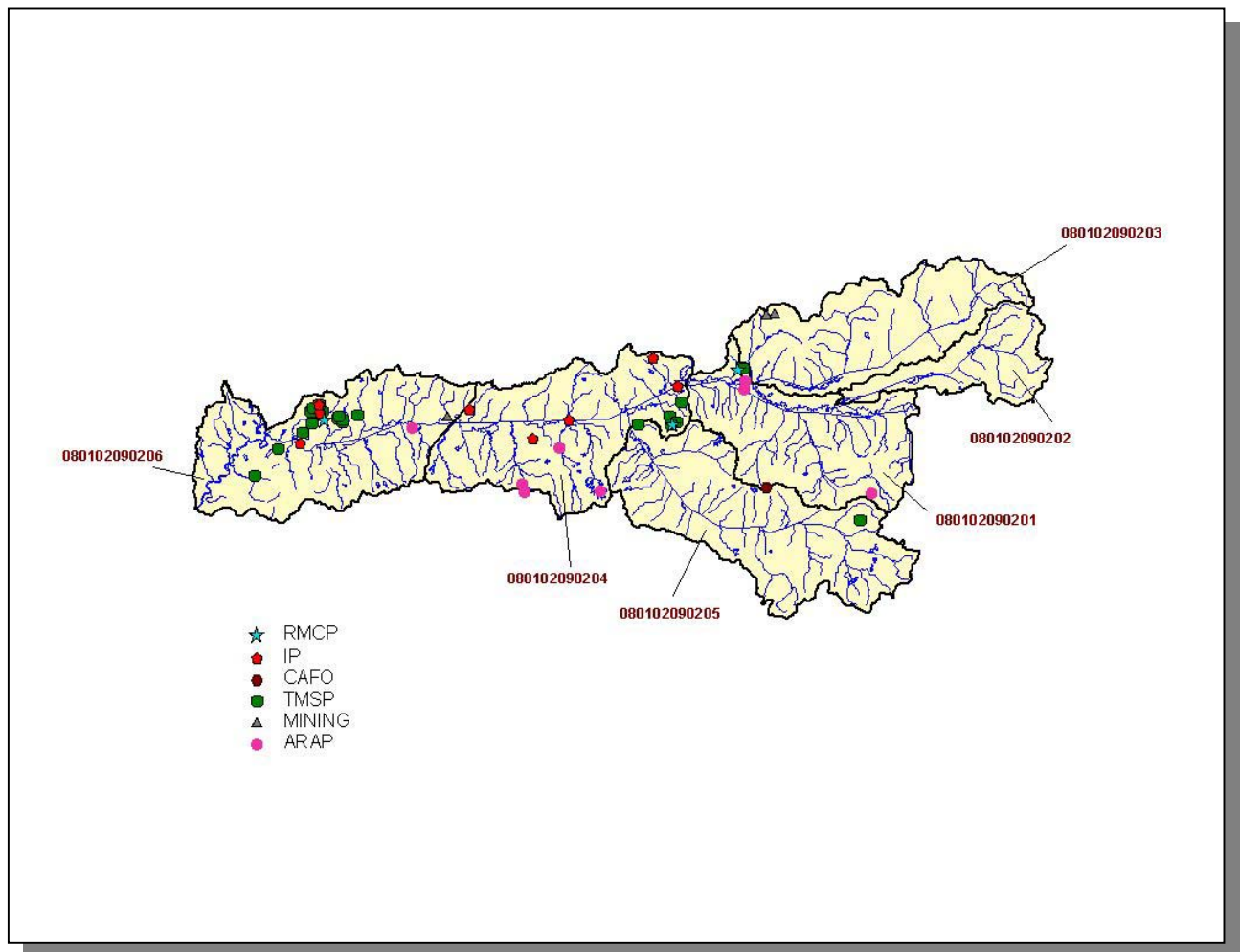


Figure 4-17. Location of Active Point Source Facilities in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information is provided in the following charts.

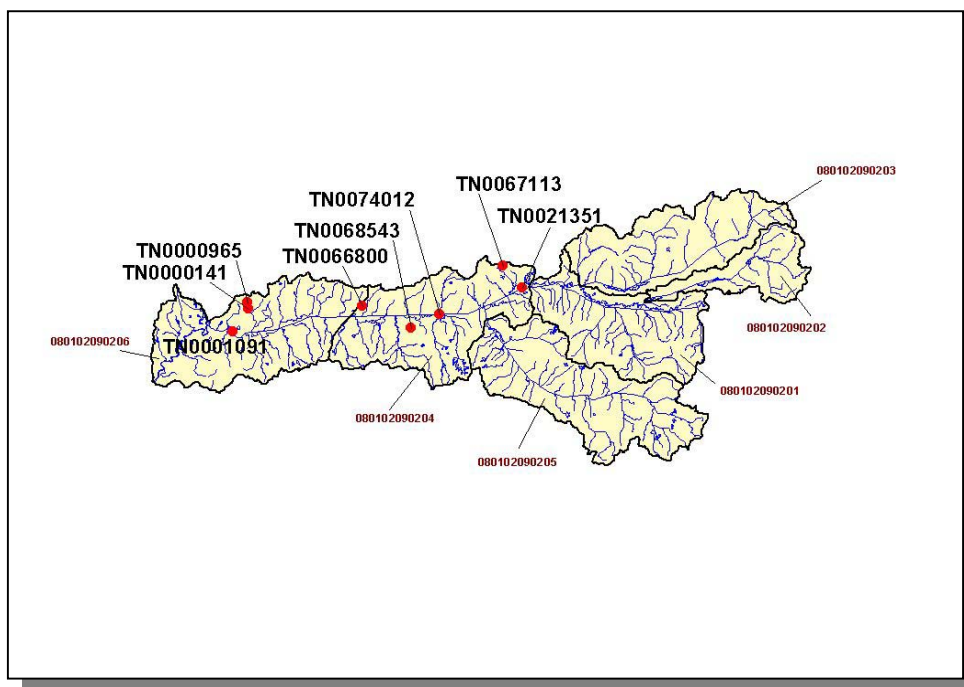


Figure 4-18. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

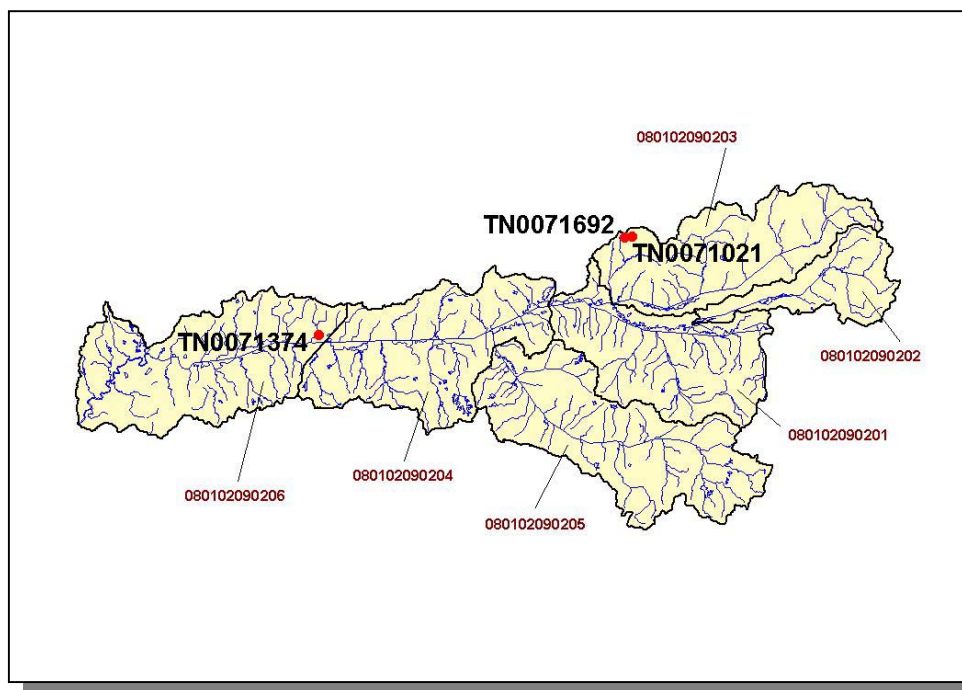


Figure 4-19. Location of Active Mining Sites in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

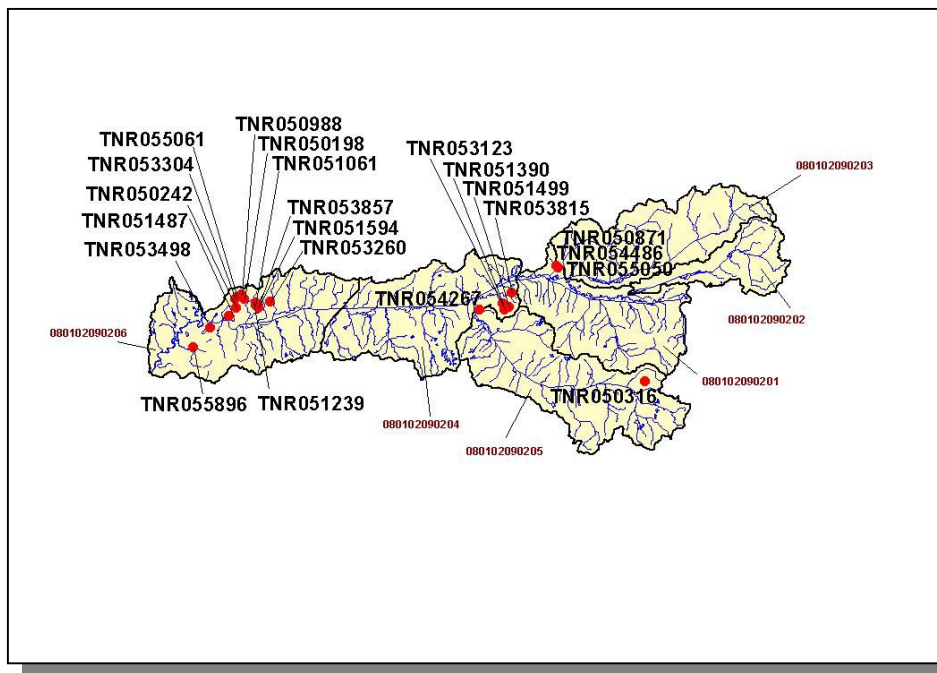


Figure 4-20. Location of TMSF Facilities in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

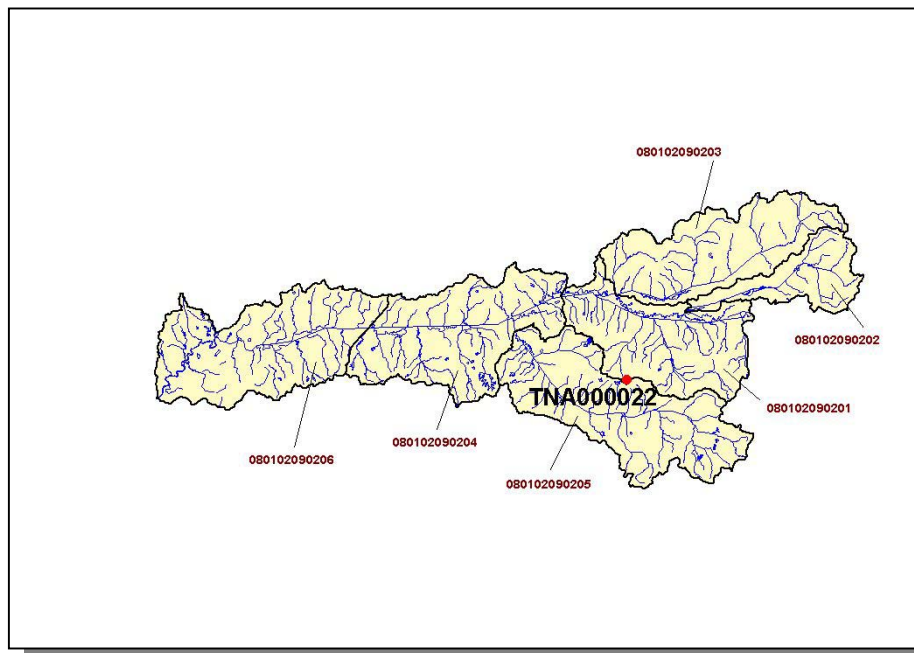


Figure 4-21. Location of CAFO Facilities in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. CAFO rules may be found at <http://cfpub.epa.gov/npdes/afo/cafofinalrule.cfm>. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

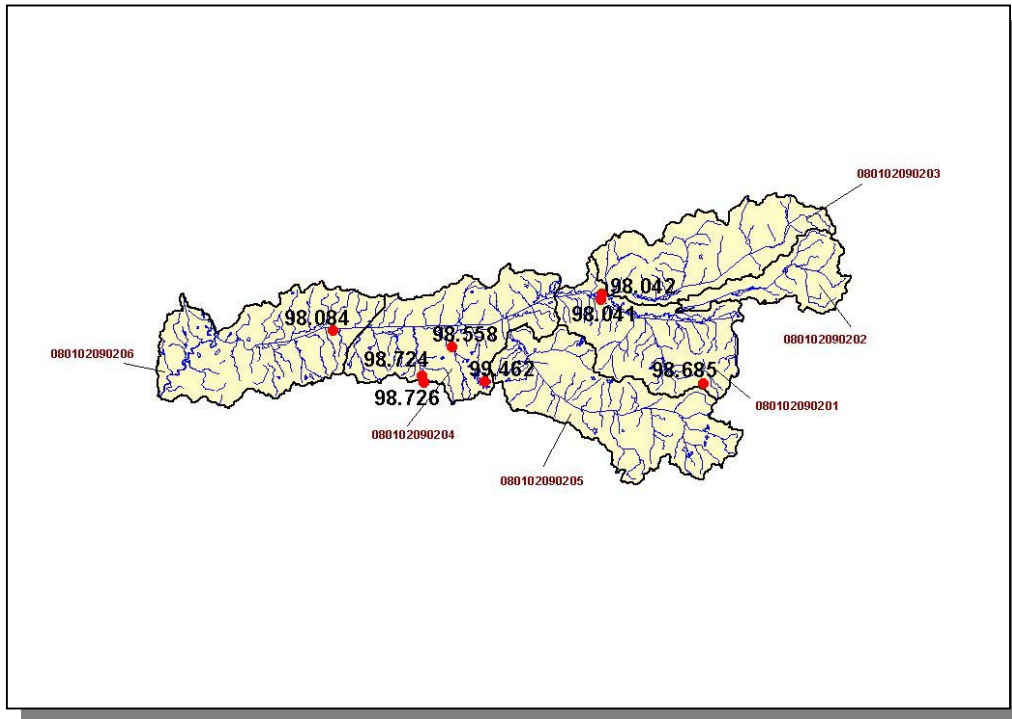


Figure 4-22. Location of ARAP Sites (Individual Permits) in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

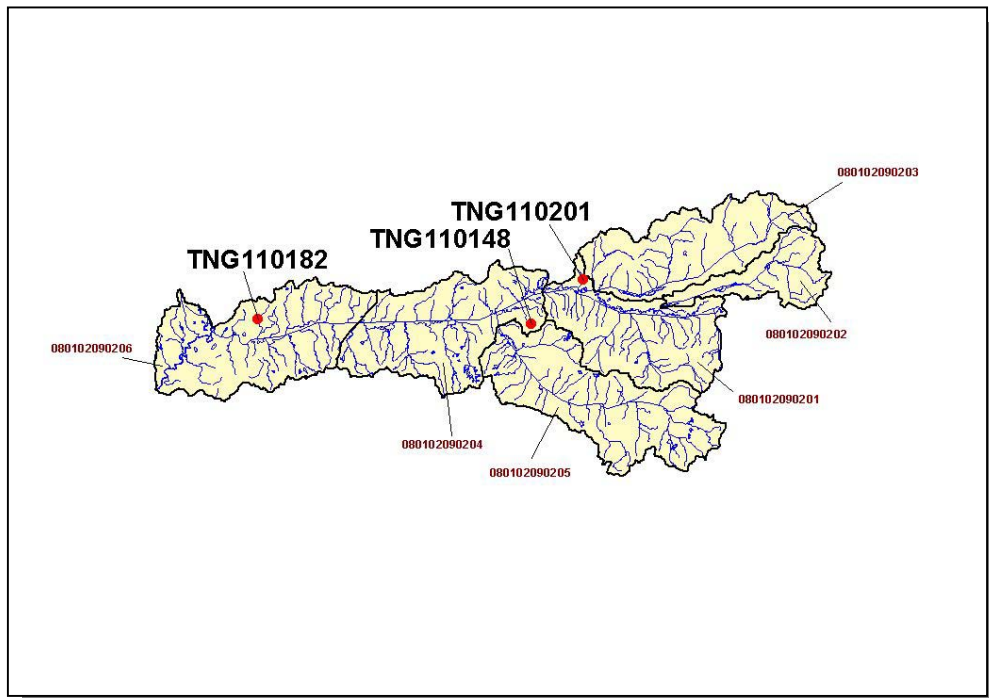


Figure 4-23. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

4.2.A.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List

There are six NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 0801020902:

- TN0000141 (PCS Nitrogen fertilizer) discharges to a wet weather conveyance to the Loosahatchie River @ RM 11.7
- TN0000965 (Air Liquide America) discharges to a wet weather conveyance to the Loosahatchie River @ RM 11.8
- TN0001091 (E.I. DuPont and Co.) discharges to the Loosahatchie River @ RM 11.8
- TN0066800 (Bartlett STP #1) discharges to the Loosahatchie River @ RM 18.4
- TN0068543 (Bartlett STP #2) discharges to the Loosahatchie River @ RM 24.0
- TN0074012 (Lakeland Lagoon) discharges to the Loosahatchie River @ RM 24.1

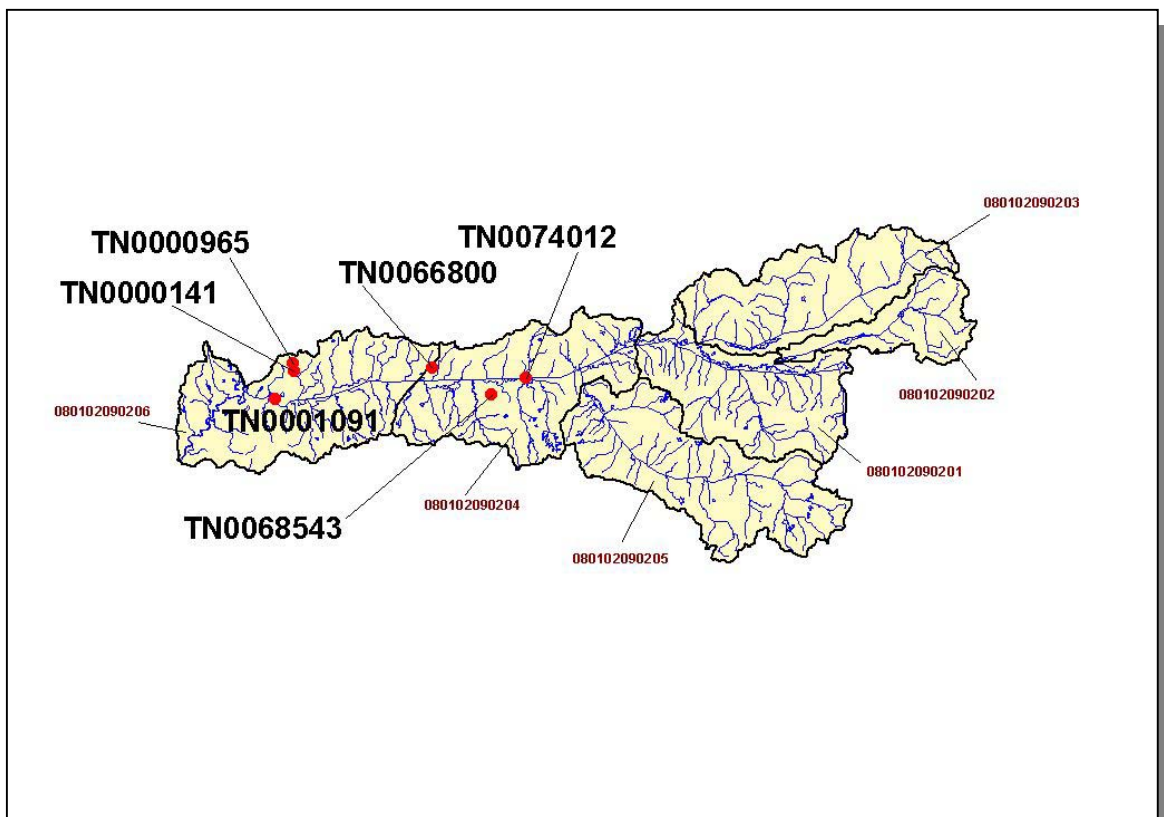


Figure 4-24. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 0801020902. Subwatershed 080102090201, 080102090202, 080102090203, 080102090204, 080102090205, and 080102090206 boundaries are shown for reference. More information, including the names of facilities, is provided in Loosahatchie-Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0000141				32.19	0.38000
TN0000965			37.03		0.01700
TN0001091	36.00	36.32	37.03	32.19	6.12000
TN0066800	36.00	36.32	37.03	32.19	2.20000
TN0068543	36.00	36.32	37.03	32.19	0.50000
TN0074012	36.00	36.32	37.03	32.19	0.50000

Table 4-11. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0801020902. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	CBOD ₅	BOD ₅	pH	WET	NH ₃	FECAL	TRC	SETTLEABLE SOLIDS	OIL and GREASE	TSS	DO
TN0000141	X		X	X	X		X		X	X	X
TN0000965			X						X		
TN0001091		X	X	X					X	X	
TN0066800	X		X	X	X	X		X		X	X
TN0068543	X		X			X	X	X		X	X
TN0074012	X		X		X	X	X	X		X	X

Table 4-12. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0801020902. CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); BOD₅, Biocemical Oxygen Demand (5-Day); WET, Whole Effluent Toxicity; TRC, Total Residual Chlorine; TSS, Total Suspended Solids; DO, Dissolved Oxygen.

4.2.B.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold	Hogs	Sheep
4,640	8,548	237	13	0	6,072	74

Table 4-13. Summary of Livestock Count Estimates in Subwatershed 0801020902. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Fayette	152.0	152.0	1.0	3.3
Shelby	111.6	111.6	0.0	0.0
Total	263.6	263.6	1.1	3.3

Table 4-14. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0801020902.

CROPS	TONS/ACRE/YEAR
Grass, Forbs, Legumes (Mixed Pasture)	0.51
Grass (Pastureland)	0.39
Legume/Grass (Hayland)	0.22
Legume (Hayland)	2.23
Grass (Hayland)	0.22
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Corn (Row Crops)	13.09
Soybeans (Row Crops)	10.91
Cotton (Row Crops)	9.81
Sorghum (Row Crops)	4.91
Wheat (Close Grown Cropland)	3.46
Summer Fallow (Other Cropland)	12.43
Fruit (Horticulture)	0.39
Conservation Reserve Program Lands	0.61
Other Vegetable and Truck Crops	5.87
All Other Crops not Planted	4.80
Non Agricultural Land Use	0.00
Farmsteads and Ranch Headquarters	0.28

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 0801020902.